

From owner-qrp-l@lehigh.edu Mon Jun 3 23:05:34 1996
From: Dave.Ackrill@WESTWOOD45.powergen.co.uk
Subject: [9284] Altoids and 80M Loops
Message-ID: <960603120201Z*/G=Dave/S=Ackrill/O=WESTWOOD45/PRMD=POWERGEN/
ADMD=CWMAIL/C=GB/@MHS>

Hello everyone at the QRP-L List,

As a new user, let me introduce myself:-

Name = Dave
Callsign = G0DJJA
G-QRP Member No. = 3247

So, down to the reasons for this message.

1st, as a Limey, what is/are "Altoids" (sound painful!) and what use are they to QRP, or is it the box? Over here an OXO box was used once upon a time. OXO is a company who make cubes of gravy stock granules (still available) but they used to come in a small metal box. Others used tobacco tins, or cigar boxes. Somehow, those new plastic pouches don't seem to work so well ;-)

There was a design in SPRAT some years ago for a "Fag-box-o" (Fag over here = cigarette). This was a "spy" transmitter in a cigarette pack. Nowadays, which self respecting spy would want to go to the segregated "smokers only" area where everyone would be watching? I'm a non-smoker before anyone asks HI!

2nd point, KB2TE0 mentioned an 80M delta loop. I've just put up a loop that is made of about 95 metres of wire. The "design" is based upon the layout of the garden, so the arrangement is:-

Open wire feeder out of the window, one leg goes up to the chimney (about 10 metres above ground) down to the bottom of the garden (about 30 metres) along the bottom fence (about 12 metres) up the other side of the garden (about 40 metres) then about 13 metres sloping up to the chimney. The open wire feeder joins the loop on the 13 metre leg from the end of the fence up to the chimney, so I would guess you could say that it is fed half way up one "side".

The tuner is an MFJ-901B Versa Tuner and I can get the system to load up on all bands from 80 to 10 metres. Top band doesn't load at all, so I will try making another ASTU, anyone got any ideas for designs please? I know that I can build better tuners than the MFJ, but I was feeling lazy one day and bought this one to get me on air without fuss HI! Now I've been told that the Balun inside is really only designed

for a fixed balanced line impedance, but it seems OK anyway. Impulse buying is alive and well :-)

Last thought, before you all get too bored and flick onto the next message (too late?), over here the cost of Ten-Tec gear seems to equal the number of Dollars, but in Pounds ! Must be a heck of a postage rate HI! Someone sent me a Dollar bill for a QSL card, at this rate it will be 150 years till I can afford the new Ten-Tec rig - Back to the Oner.....

72 de Dave (G0DJA)

From owner-qrp-l@lehigh.edu Mon Jun 3 23:05:34 1996
From: Jim Stafford-W4QO <w4qo@america.net>
Subject: [9308] Atlanta Hamfest - QRP forum -June 8
Message-ID: <Pine.SOL.3.91.960603134322.23090F-100000@atl1>

The NoGaQRP group (North Georgia) and QRP-ARCI will be hosting a QRP forum at the Atlanta Hamfest on June 8. The program/forum will begin at 9:30 AM. The hamfest this year will be held at City Hall East (the old Sears Building on Ponce de Leon). Talkin will be on 146.82.

The program has not been finalized and suggestions are welcome. Persons wishing to speak should contact me immediately. Otherwise, we hope to see many QRPers from around the Southeast at this event. I suspect that QRP-ARCI/NoGaQRP will also have a table at the hamfest. Stay tuned for details.

Jim Stafford, W4QO RadioActive Schools(sm) -
11395 West Road Using amateur radio as
Roswell, GA 30075-2122 a teaching tool in north
770-993-9500 Georgia area schools.
Packet:W4QO@WA4BRO.#atl.ga.usa.na Internet: w4qo@america.net
QRP-L #267 QRP-QRCI #6515 G-QRP #5588 MiQRP #897 NorCal NoGaQRP

From owner-qrp-l@lehigh.edu Mon Jun 3 23:05:34 1996
From: tdrumm@sparc.isl.net (Tony Drumm)
Subject: [9337] Cascade update and questions

Message-ID: <199606040233.VAA24523@sparc.isl.net>

I'm making steady progress in between Boy Scout campouts and meetings, work, and other duties! I just added the final transistor last night. Found out quickly that it should not be bolted to the rear panel using a bare metal screw. (Not quickly enough - lost a couple fuses!). My guess is that the small plastic spacer should be used although it appears I'll have to increase the size of the 1/8" hole I drilled in the panel to use it. I'll also have to drill out the hole in the transistor, too, or sand the spacer to fit only through the panel. Am I on the right track here?

Getting a nice signal out on 75m. However, on 20, I get enough signal to hear in my ICOM but it is so low it barely moves the needle on the WM-1 at the milliwatt setting. I tuned up the band module transmitter filter caps which helped the signal level but it's still not moving the meter. I checked the continuity of the band module toroids (been bitten by that problem before!). I'll probably use a scope to trace the signal next. My scope is a low freq. Heathkit but I do get enough envelope at RF to follow things. Any other ideas?

This has been a fun project. Can't wait to get it on the air!

72.

Tony Drumm

Rochester, MN

internet: tdrumm@isl.net

Packet: aa0sm@wd0gnk.#semn.mn.usa.na

From owner-qrp-1@lehigh.edu Mon Jun 3 23:05:34 1996

From: torell@sicom.com (Kent Torell)

Subject: [9311] Chirpsounder stuff...

Message-ID: <v02130502add8d2357aca@[192.91.202.41]>

The 'chirpsounder' is a nifty propagation measuring system developed in the 70's and marketed by BR Communications. Basically, many transmitters are set up around the world, and they transmit a cw chirp (continuous linear ramp in frequency) starting at 2.0 Mhz and stopping at 30.0 Mhz. I think the output power is 10 watts. The chirp rate is 100 Khz per second. When you hear a signal rapidly sliding through your receiver, it isn't some lid tuning while holding the key down, but rather it's one of these transmitters. Their transmit time is set very accurately, so if you check the second hand of your watch when you hear this chirp signal, you can figure out where it came from (assuming you know all the tx units, most of which are semi-classified). A few I've found start transmit at the following times: (it passes through 10.1 Mhz 81 seconds later) ...times

are minutes after the hour....

Utah	5:45	20:45	35:45	50:45
Hawaii	3:10	18:10	33:10	48:10

For example, I heard the Hawaii station last nite at around 21:49:31 while tuning around 10.115.

Other stations that might be there:

Gibraltar	6:30	21:30	36:30	51:30
Key West, FL	5:56	20:56	35:56	50:56
Hong Kong	3:20	8:20	13:20	18:20

... every 5 min!

US stuff is tough to find...some possibles are (may not be active)

Palo Alto, CA	10:16	25:16	40:16	55:16
Edmonton, Alberta	5:32	20:32	35:32	50:32
Maryland	0:38	15:38	30:38	45:38
North Carolina	0:54	15:54	30:54	45:54
Huntington, NY	0:30	15:30	30:30	45:30

Example calculation:

Maryland, monitoring 7.00 Mhz

$(7.00 - 2.0) / 0.1 = 50$ seconds

$50 + 0:38 = 0:88 = 1:28$, so listen at 1:28, 16:28, etc.

Kent Torell torell@sicom.com 602-483-2867 x40
SICOM 7585 E. Redfield, #202 Scottsdale, AZ 85260
AB70A Tmps 1996 Qs=009 States=08 Confirmed=01 DX=00
AZ CO HI KS OK OR TX WA

From owner-qrp-1@lehigh.edu Mon Jun 3 23:05:34 1996
From: adams@chuck.dallas.sgi.com (chuck adams)
Subject: [9280] Crystals
Message-ID: <199606030445.EAA10070@chuck.dallas.sgi.com>

Gang,

Just a few notes on Quartz Crystals from the workbench.

I just built the Crystal Tester circuit written up by
Larry G. Ledford, KA4J, in the January 1992 issue of

73 magazine. I picked up the board set (the crystal osc circuit and a board for using 12V cube to 9V power) at Dayton for \$4 from FAR Circuits.

I took 100 9.000MHz crystals and measured the frequency of each and everyone. These are from a batch I received on the front door step the day that I was leaving for MtView CA week before last.

Here are the numbers

9.000250-9.000299	4
9.000300-9.000349	5
9.000350-9.000399	12
9.000400-9.000449	26
9.000450-9.000499	14
9.000500-9.000549	19
9.000550-9.000599	18

where the numbers indicate the freq range and the number of crystals measured in each range.

1. Any given crystal will most likely oscillate at a frequency other than what is marked on the case unless you are using the exact same circuit that the manufacturer used to qualify the crystals.

2. I powered up the oscillator and then took the reading after 20 seconds. This was for two reasons: a) not to take all day doing the measurements and b) to give the crystal some time to stabilize due to heating.

3. I used a Heath IM-2410 calibrated with WWV using the Heath GC-1000 clock receiver. After every 25 measurements I rechecked the calibration and then remeasured the first crystal. All measurements checked to the exact same readings.

You'll note that the totals do not add up to 100 due to a couple DOA crystals that did not oscillate in the circuit.

Wes Hayward, W7ZOI, and others have written up how to match crystals for filters and the above measurements will show that unless one pays top dollar for closely spec'd crystals, there will be some variance in the resonant frequencies of a batch of crystals. Just a fact of life.

The above crystals were spec'd at 100ppm and were well

within that range.

I found 3 crystals that from cold start to over 15 minutes (I just had to do this part when I ran across them) did not drift one single cycle!! I found 2 others that had a negative drift instead of a positive drift as the others did. Zero drift is rare and if you find such puppies don't part with them. I will in this case but you shouldn't.

There are probably a large number of this group that did not know that there is a power dissipation limit on a crystal. It is not recommended that you have more than 2mW being used to heat the crystal. It is detrimental to the life of the crystal. So for the 40-9ers and other transmitters and the mods that you make to them be sure to watch just how much power is being fed to the crystal. You can destroy them fairly easily.

In order to get a crystal filter at say 9.0000MHz with low insertion loss and a narrow BW, you have to go through a large number of crystals. Most manufacturers can't afford to do this without passing on a significant cost to you and me. I found 4 crystals at one frequency 9.000500MHz that were within 6Hz. I could have found others within the range measured with comparable tolerances, but this wasn't the exercise and I surely wasn't going to put little stick'ems on each to keep track.

I was surprised by the lack of a Gaussian Distribution though. Maybe if I did another 500 crystals I would find that but I'm not about to expend more time on this. (well, not at this time) :-)

Also in time crystals will age, i.e. change their resonant frequency thus affecting the circuit they are in. That's why with the aging of the other components in a circuit you need to retune a rig every year or so, depending upon how much you notice a change in the rig's characteristics.

So what's the purpose of this exercise? If you were to get a kit and want to really up the performance you'd have to make the above measurements. So what would you add to the cost of the rig?

1. Freq Counter ~\$50 or so. I did find another IM-2410 at Dayton for that price. It worked and it was within 30Hz of being calibrated, so if you find one of these puppies this hamfest season, grab onto it.

2. Test circuit ~\$10 if you use ugly construction and have a good selection of parts.

Then the cost of a number of crystals if the set you get with your rig aren't as close as you'd like. With a \$100 pocket frequency counter (which I found wasn't as sensitive as the Heath) and the battery powered tester you could walk into a surplus place and pick and chose from the bin. Get permission to do this first. :-)

Danny Stevig, at Dan's Small Parts, several years ago started selling the NN1G Mark II (the one with two board set) xcvr. I bought the 20M version, which I still use from time to time, and I noted that the receiver was exceptionally sensitive and very good. In a phone conversation I asked him about the crystals in the filter. He told me that he used an Icom receiver and a test circuit to test the crystals that he had in stock. He was taking a set of crystals and finding those that measured the same on the ICOM. He also noted the signal level. In effect he was getting an almost perfectly matched set of crystals both in frequency and crystal activity (how well they resonated with very little energy). So for those that still have their NN1G rigs hold on to them. You won't find another set of crystals matched that well except by chance. Unless someone is doing something that I'm not aware of.

Another thing about crystals. In a VXO circuit you are doing some things to effect the resonant frequency of the crystal and cause it to move away from the natural resonant point. In a stock 40-9er I found about a 10% change in output of the transmitter doing this. For those that went and made mods that allowed a much larger "swing" in the frequency range I'm still interested in what you found happened to the output (accurately measured) over this range. Let us know. I believe that you can get significant variance in the output power. Also watch for frequency drift also.

There are laws of Physics at work here and it is pretty complex. If you want more detailed analysis I'll try to write up some more as time permits. Books have been written on this stuff but there is still more work to be done.

dit dit

Oh, at yesterday's NorCal meeting the wind exceeded over 90mph!! A storm blew through and did severe damage to trees, antennas, and power lines. We were inside of course.

More wind than at Riley NM in April. :-)
Ask us about the wind. :-) Come see us at HamCom this next weekend in Arlington TX. Two QRP sessions - one on Sat and one on Sunday room M1 at 10-11a.m. if I remember the time correctly. Check the schedule at HamCom. Mileage may vary.
--
Chuck Adams (K5FO CP-60) adams@sgi.com
K5FO Tmps 1996 Qs=021 States=15 Confirmed=07 DX=01
AZ CA CO FL IL IN MI OK OR SD TN TX UT WI WY

From owner-qrp-1@lehigh.edu Mon Jun 3 23:05:34 1996
From: QRPBOOK@aol.com
Subject: [9306] Data Book Shipments
Message-ID: <960603132524_126746050@emout13.mail.aol.com>

To all who ordered the Data Book for Homebrewers by Paul Harden, NA5N:

Two shipments of books have arrived and shipments will go out this week.

Tnx for your patience.

Rich W0HEP
Five Watt Press
Electronic Data Book for Homebrewers and QRPers including QRP Yellow Pages
(Introduced May 16 in Dayton)

From owner-qrp-1@lehigh.edu Mon Jun 3 23:05:34 1996
From: "L. B. Cebik" <cebik@utkux.utcc.utk.edu>
Subject: [9312] Delta loops (long, erase now if not interested)
Message-ID: <Pine.SOL.3.91.960603144617.25713A-100000@utkux4.utcc.utk.edu>

More notes on the delta loop

Several folks raised some further questions about the delta loop. so I ran a more complete series of models, including some at lower heights and with varying feedpoints. Although I cannot put patterns on the net, here is a summary of the results.

All antennas are #12 copper wire, total length $1038/f$ (42.8'/side at 7.15 MHz) over medium earth (via Somerfeld-Norton ground calculations). All initial models are 35' above ground at bottom and 76.91' at the top. All gain figures in dBi, dimensions in feet, and impedances in Ohms.

1. You can run a delta with the horizontal low or high. If you run it high,

you will get better gain (more wire higher) and lower angles of maximum radiation (T0 angles) than with the horizontal wire low, about 1.3 dB more, and about 9 degrees lower.

2. If you feed the side, a point about 25 percent up the leg from the bottom provides the lowest T0 angle (15 degrees), the maximum vertical component to the wave polarization, but the lowest max. gain (1.4 dBi). By way of contrast, here is a chart of deltas and their radiation at 15 degrees:

Type	Feedpoint	Gain	Z
Hor low	Middle of bottom	2.28	138 - j1.4
Hor low	Low corner	1.85	121 - j18
Hor low	25% up	1.39	110 - j15
Hor low	Mid-side	1.91	116 - j11
Hor low	Top peak	2.15	140 - j11
Hor high	Middle of top	5.38	115 - j15
Hor high	Bottom apex	5.24	117 - j23
Hor high	Mid-side	2.97	111 - j11
Hor high	25% up side	1.17	108 - j11

As you can see, low angle radiation favors the centered horizontal feedpoint, whether top or bottom, whether the delta is point up or point down. Point down is the superior performer, as shown by this little chart:

Type	Feedpoint	Gain	T0 Angle	Z
Hor high	Middle of top	7.50	28 deg	115 - j15
Hor high	Bottom apex	7.34	28	117 - j23
Hor low	Top apex	5.88	37	140 - j11
Hor low	Middle of bottom	6.01	37	138 - j1.4

Of course, bottom apex feeding of the hor high, apex low version may be the most convenient, and the .16 dB reduction below max gain is insignificant.

3. As you lower the bottom of the antenna, the T0 angle increases, so that the bottom low middle of bottom wire fed version loses its advantage over the corner, 25% up, and 50%up the side fed versions. However, the Hor high, fed top or bottom version retains its advantage over the corner or side-fed versions.

Type	Heights (')	Gain	T0 angle	Z
Hor high	35 bot, 76.91 top	7.34	28 deg	117 - j23
	Same at T0 = 15 deg	5.24		
Hor high	20 bot, 61.91 top	6.28	35	135 - j17
	Same at T0 = 15 deg	2.91		
Hor high	5 bot, 46.91 top	5.50	46	131 + j5
	Same at T0 = 15 deg	0.48		
Hor low	35 bot, 76.91 top	6.01	37	138 - j1.4
	Same at T0 = 15 deg	2.28		

Hor low	20 bot, 61.91 top	5.13	51	124 + j26
	Same at T0 = 15 deg	-0.24		
Hor low	5 bot, 46.91 top	1.91	72	107 + j43
	Same at T0 = 15 deg	-4.96		

The losses of radiation to ground increase rapidly as the horizontal at the bottom version of the delta loop gets lower. Where the horizontal is at the top of the antenna, the gain is initially higher, the angle is lower, and the gain decreases more slowly as the antenna approaches the earth. Until the apex of this version gets well under 20', it is still likely to outperform a corner/side-fed version, even at the lower angle needed for dx. (And, some studies suggest that at lower frequencies, the angle necessary for a path is higher than it is for higher frequencies--all within limits, of course, that is within the 8 to 20 degree range.)

4. Polarization: with any loop antenna used at HF for other than point-to-point communications (miscalled "line-of-sight"), polarization is of no concern. A loop has both kinds, because current is flowing in all the wires, the orientation of which determines field generation. The reason there is no magic to polarization is that the ionosphere scrambles it before it starts down. However, the side-fed models have lower angles of max radiation because of the greater proportion of vertically polarized radiation. Nonetheless, their total fields remain weaker due to some field/current cancellation.

The key measures are a combination of total field and the T0 angle of interest. The latter is often the angle of max radiation in the absence of other considerations, but if you have a path you are concerned about, then that angle is of concern. I have chosen 15 degrees for 2 reasons: it is the lowest angle of max radiation for the side-fed models and it is a good dx angle on 40 meters. The greater gain at higher angles of the top and bottom fed models is not lost, but will of greater benefit for domestic or short-hop QSOs.

5. Feeding the loop: With minor length adjustments (and remember that models will not tell us what your house and trees are doing to the antenna pattern of feedpoint impedance), any of the models can be brought to resonance and fed with a balun of the proper ratio and coax. Remember to cancel the reactance on the antenna side of the balun, since (as balun guru Jerry Sevick notes) transmission line transformers work best with resistive loads.

However, as I see it (which may differ from how others see it), there is little point in putting that much wire in the air without trying it on a lot of bands. And that means parallel transmission line and an ATU. Losses in the line will be insignificant, even with the added ATU loss, and 450-ohm line should work very well with an easy match at 40 for almost any length on any ATU. If you can find good Belden (or equiv.) 300-Ohm line, use it, but avoid the TV cheapy stuff and the shielded parallel line.

Rick (VE6GK, of FDI lunch fame) asks about a 250-foot loop, sloping, multi-sided, 15' high at the bottom and 60' high at the top, fed with 450-ohm line and used on 80, 40, etc. That ought to work quite well, especially if you cannot get a full length 80-meter dipole up to the 60' level (which, from the photos I saw ought to put the second tower in the neighbor's yard). Models suggest performance at least as good as a 60' high dipole--better for some models, a tad worse for others, but I did not have the exact layout. If a Johnson matchbox cannot match this system, sell it to me for \$5, since it obviously defective.

Rick's situation is indicative of many others: one real high point, limited linear space. Make a loop as long as possible, get it as high as possible at as many points as possible, and try to keep the low point at least at roof-top level or better. The farther away from ground you place every point along the loop, the better it is likely (but not absolutely guaranteed) to work.

Hope this exercise helps enough of the loopers and potential loopers on the net to justify the length of this note. To the non-loopers, my apologies.

-73-

LB, W4RNL

From owner-qrp-1@lehigh.edu Mon Jun 3 23:05:34 1996
From: adams@chuck.dallas.sgi.com (chuck adams)
Subject: [9314] First Spartan Sprint
Message-ID: <199606031905.TAA13649@chuck.dallas.sgi.com>

Gang,

Don't remember seeing a posting, but a reminder just the same.

Tonight, June 3, 1996 the Adventure Radio Society (not to be confused with the commercial company Adventure Radio) is having a two hour sprint.

For June 3

1. 9-11pm EDT
8-10pm CDT
7-9pm MDT
6-8pm PDT

0100-0300UTC June 4

2. 7.040 and 14.060 MHz are the areas of operation. Don't be retentative and sit right on frequency. It'll be a nightmare.
3. Exchange RST, SPC, and power output.
4. If you call CQ use CQ SP.
5. If you are portable, use UR_CALL/PQ
6. You can work the same station on two bands.

See <http://members.aol.com/adradio/index.html> for all the gory details.

Lets all get out and support Russ Carpenter, AA7QU, and the group of hardy adventurers in their trip to the fields and the wilds with their rigs in a pack carried to wherever to operate. Hopefully the QRN on 40M will quieten down just a little for the two hour period.

dit dit

--

Chuck Adams (K5FO CP-60) adams@sgi.com
 K5FO TMPS 1996 Qs=021 States=15 Confirmed=07 DX=01
 AZ CA CO FL IL IN MI OK OR SD TN TX UT WI WY

From owner-qrp-1@lehigh.edu Mon Jun 3 23:05:34 1996
 From: Bill Acito 03-Jun-1996 0843 <acito@asdg.ENET.dec.com>
 Subject: [9288] For Sale: HW9
 Message-ID: <9606031245.AA10157@us1rmc.bb.dec.com>

Mint HW-9, with WARC bands and manual, no mods, looks like it was built by a Heath technician.

\$300, I ship in the contiguous US.

b

. - I own my own words -
 Bill Acito
 acito@asdg.enet.dec.com
 |d|i|g|i|t|a|l| Digital Equipment Corporation Hudson, MA

KC1GS

qrp-ne qrp-l arci norcal amsat-na arrl-life

From owner-qrp-l@lehigh.edu Mon Jun 3 23:05:34 1996
From: Mark D Jarmuz <jarmuz@ACSU.Buffalo.EDU>
Subject: [9298] FS..MFJ 9030..CW..rig
Message-ID: <Pine.GS0.3.93.960603115136.14296A-100000@destrier.acsu.buffalo.edu>

hi gang...
I have for sale one mint MFJ 9030 CW transceiver for sale
thats in mint condx..with manual,box,etc...
100.00 bucks takes it...

AA2PF/QRP...DAVE
part of the BUFFALO,N.Y.
QRP connection...

From owner-qrp-l@lehigh.edu Mon Jun 3 23:05:34 1996
From: Scott Rosenfeld NF3I <ham@w3eax.umd.edu>
Subject: [9287] FS: MFJ 20m CW, loaded
Message-ID: <Pine.3.89.9606030756.A29234-0100000@w3eax.umd.edu>

Have in excellent condition one MFJ-9020 QRP rig. Excellent condition,
vernier drive, etc. K1BQT design superhet receiver with built-in
speaker. 5 watt output, covers 14.000 - 14.070. 6.5 x 6.5 x 2.5 inches.

Loaded? Also have the model 412 Curtis keyer and model 726 700Hz CW
filter installed. Comes with box and manual.

Actual new prices (not list): 9020 (\$170) + 412 (\$40) + 726 (\$30) = \$240.

Asking \$170 (i.e. get the filter and keyer for free).

* Scott Rosenfeld NF3I Burtonsville, MD FM19 QRV 80-10/6/2/440 *
*** VHF @ <25w, HF @ <5w *** Save a cake, pound BRASS instead ***
* 138 cfd with dipoles * QRP-L #147 QRP ARCI #9054 DXCC/WAS/WAC *
* 301-549-1022 h / 301-982-1015 w * 145.490- 147.225+ PL 156.7 *

From owner-qrp-l@lehigh.edu Mon Jun 3 23:05:34 1996

From: "Brian.Buydens@usask.ca" <buydens@duke.usask.ca>
Subject: [9319] Ground Waves
Message-ID: <Pine.OSF.3.93.960603155225.2873E-100000@duke.usask.ca>

Is there any way of estimating the distance a ground wave will travel as a function of the transmitter power, frequency, type of antenna etc.? I have been trying to use my 40-9er to communicate with a friend who lives 30 mi. away and I suspect that we are too far for a ground wave and too close for skip.

Brian.

```
+-----+
| Brian Buydens, Computing Services, University of Saskatchewan |
| email: Brian.Buydens@usask.ca |
| VE5RDV |
+-----+
| Albert Einstein, when asked to describe radio, replied: "You see, wire |
| telegraph is a kind of a very, very long cat. You pull his tail in New |
| York and his head is meowing in Los Angeles. Do you understand this? |
| And radio operates exactly the same way: you send signals here, they |
| receive them there. The only difference is that there is no cat." |
+-----+
```

From owner-qrp-1@lehigh.edu Mon Jun 3 23:05:34 1996
From: Joseph Spencer <jspencer@StarText.NET>
Subject: [9294] HAMCOM '96 TX
Message-ID: <199606031441.JAA07399@lepton.starttext.net>

Hi Gang,

Well with Four Days in May over it is time for...

"Three Days In June"

And here is the information:

HAMCOM 1996 Arlington Texas June 7,8,9 1996
Arlington Convention Center, Arlington TX

We will have the same four tables as last year, and also
one table outside for the QRP-A-Parking Lot(Weather permitting).

Programs

Saturday QRP program

Time: 11 a.m.

Room: M1

Subjects: QRP afield and QRP in general

Speaker: Chuck Adams K5FO

Sunday: QRP FORUM

TIME: 10am

Room: M1

Subjects: A myriad of QRP subjects may be discussed.

Wayne W5WO said he will bring his circuit boards and speak on board design/etching/making/etc.

Everyone is welcome to bring any gear they want to sell as well as stuff for show and tell...as always we need volunteers to man the tables.

Come by and visit.. we will have the QRP ARCI Banner up and be at Row M

Tables 1-4. We will have info/application sheets and a display like last year.

Possibly some goodies from DAYTON. Hope to see you there!

HAMCOM Hours: Friday: 5pm-9pm Sat: 7am-5pm Sun: 730am-1pm (all times local)

Talk-In 147.140 (pl 110.9)

73/72 Joe KK5NA

From owner-qrp-l@lehigh.edu Mon Jun 3 23:05:34 1996

From: Doug Hendricks <ki6ds@telis.org>

Subject: [9278] Heathkit Quality Kits Today

Message-ID: <31B25DA1.389E@telis.org>

I read a posting that someone made that alluded to the fact that OHR was the only company that had Heath like kits today. Boy do I disagree on that one. OHR is better than Heath ever was, and so are the kits from Wilderness, Small Wonder Labs, S&S Engineering, Emtech, and Kanga US. How do I know? I have built Heathkits and I have built kits from all of the above. I would love to see TenTec get in the QRP Transceiver business, the more the merrier. This is a free market, and the market will determine who is successful and who is not.

There are two companies that market kits that I would not recommend and those are RadioKit and Ramsey. In my opinion both of them leave a lot to be desired when it comes to kits, both in quality of the final product and the instructions. I have built both of their kits, and they were disappointments to say the least.

The kit companies today are very responsive to the marketplace, they have to be or they will quickly fade from view. (Nils is it

possible to quickly fade from view? I think that is a misnomer or some fancy English term that was explained while I was daydreaming.) We are much better off as QRPers than we were when Heath was just about the only game in town. The manuals that all the above companies have are excellent both in detail and instruction.

I have learned a ton from my building experience and have Dave Benson, Dick S. (sorry can't spell Dick or Kathy's last name), Wayne Burdick, Dick Witzke, Sheldon Hands, Dick Pascoe, John Liebenrood, Derry Spittle, Joe Stipec, Bruce Gellately, Roy Lewallen, Wes Hayward, Rick Campbell, Rick Littlefield, Rev. George Dobbs, Ed Burke, Jim Pepper, Dave Gauding, Randy Miller and probably a ton of others to thank for the practical experience that their efforts gave me.

I welcome new players to the game. It is their money that they are investing. Let them decide how to spend it. They are taking the risk so they get to call the shots. Encourage, rather than discourage.

Welcome to the game TenTec, I am anxious to see your new product. I don't know if I will buy it or not, but I did buy and enjoy building your 9 band Regen Receiver, 4 band Regen, Ham Bands Receiver, Keyer Kit, and Noise Bridge. 72, Doug, KI6DS

From owner-qrp-1@lehigh.edu Mon Jun 3 23:05:34 1996
From: "richard wilkerson" <richqrp@msn.com>
Subject: [9299] help
Message-ID: <UPMAIL07.199606031602410418@msn.com>

does anyone know a replacement for a 2SC1678 or 2SC2075 seems Mouser that is about a mile away does not carry listings for any 2SC's.thanks rich wd6fdd

From owner-qrp-1@lehigh.edu Mon Jun 3 23:05:34 1996
From: "richard wilkerson" <richqrp@msn.com>
Subject: [9307] help
Message-ID: <UPMAIL07.199606031728090081@msn.com>

Ok then..what is the difference between the 2SC1678 and the IRF510??thanks rich wd6fdd.

From owner-qrp-1@lehigh.edu Mon Jun 3 23:05:34 1996
From: Art Searle <asearle@netusa.net>
Subject: [9320] Help Tnx for NC40A
Message-ID: <31B39D6D.7EE8@netusa.net>

I wrote:

> My problem is the receive audio is very low and so is sensitivity.
> I've tried to adjust C1 & C2 per the instruction, but I don't get
> the sharp peaks (or any peaks at all) I'm supposed too.

A big thank you goes to Wayne Burdick, N6KR who in his first suggestion wrote:

<Your problem is likely to be reversal of the primary and secondary on one
<of the transformers associated with the receive mixer. In both cases, the
<winding with the larger number of turns should be connected to the NE602.
<Double-check the drawings; they were confusing for some people and I've
<tried to correct them recently.

Runnerup thanks go to Charlie Rubenstein, KB8BWE

>Art, I would bet that you have T2 installed backwards. Don't feel bad, I
>did it TOO.
>The primary goes to 3-4 and the secondary to 1-2.

And that was my problem. In T2 you wind the secondary first and then pass the primary through the center for only one turn. This is the opposite of the other 2 toroid transformers. I actually started to install it right and desoldered it and reinstalled it backwards. I didn't read the directions carefully. The radio works great now.

Are you interested in my opinion of the Wilderness NorCal 40A kit? Read on, if not, delete.

The kit was very easy to build and that is saying something from this non-electronic wiz. I made a total of 3 errors, all my fault. 2 of the errors I found before finishing the kit.

1st error: The first toroid L6 I wound with the wrong wire gauge and installed it on the pc board before I noticed my error. The instruction say, "Wind L6 as described (#28 enamel). . . . Note that #26 wire is just slightly thicker than #28." It specified #28 and said #26 is thicker, so stupid me, I grabbed the thicker #26 and wound the toroid. I wonder if this error would have made a difference if uncorrected other than running out of #26 wire.

2nd error: The PA transistor had an insulator packed with it. I took this to be the spacer and installed the PA transistor. This left the right spacer left over after I finished the kit. I then realized my stupid error.

I was able to get the transistor out and install the right spacer and the leads were just barely long enough to resolder.

Keying click: One comment on the fix for the audio keying clicks.

You install a 10 or 20 ohm resistor between D1 & D2 and cut the circuit board trace between them. It works but you have to cut the trace in the right place and there are 3 to choose from.

```
o - D2 anode
|
| < cut here
|
|----o D1 cathode
| ^ not here
|
| < obviously not here
|
```

It took me 2 tries to get it right.

In anticipation of installing the KC1 keyer/counter I used a 10 turn 10K pot I got from Mouser, part #594-53411103 cost \$10.80. Be careful or you will get your VFO tuning backwards (one error I didn't make).

72, de Art WU2K

PS Question on KC1 soon to follow.

--

72,73, de Art Searle, WU2K, Long Is., NY, ARRL Life Member
QRP-L #524, QRP ARCI #9123, NorCal pending, DXCC MX & CW HR
NRA Benefactor Life Member, NMLRA Life Member, AMA Life Member
NRA Certified Firearms Instructor, Dale Earnhardt Fan Club

From owner-qrp-l@lehigh.edu Mon Jun 3 23:05:34 1996
From: pelt@vt.edu (Randy Pelt)
Subject: [9328] Help With Volt Reg Pins
Message-ID: <199606040108.VAA11714@sable.cc.vt.edu>

I have an LM2931A 5 volt regulator. It is in a T0-220 case. Can someone tell me which leg is for the voltage in, out, and ground. The handbook has about four different layouts for T0-220 cases.

Help is appreciated.

Thanks

Ranson J. Pelt
pelt@vt.edu
de nz4i

From owner-qrp-l@lehigh.edu Mon Jun 3 23:05:34 1996
From: Doug Hendricks <ki6ds@telis.org>
Subject: [9279] June NorCal Meeting Report
Message-ID: <31B26716.77A0@telis.org>

The third anniversary of the NorCal QRP Club was celebrated in true NorCal style, meeting as usual, nothing special or formal done. Wayne Burdick, N6KR, got confused and thought it was the 4th anniversary, but that is ok, he is a designer, and they tend to lose track of time, as you well know if you ever work with them. It has been a fantastic 3 years, we now have 1725 members in over 50 countries and all 50 states. A remarkable growth that is a tribute to the internet and the communications that are available today.

Jim Cates and I are very proud of NorCal. Our Journal, QRPp has published 864 pages of QRP information, we have had the NorCal 40, Sierra, Cascade, NorCal Curtis Keyer, 49er, and the St. Louis Tuner as club kits. We have several more offerings in the pipeline, and are always looking for more. We have seen attendance at the monthly meetings hold at a steady 50 to 70 people every month. This with no business meeting, no program, no rules, just show up and enjoy QRP fun. This has all been made possible by our members, thank you for all that you have done. Everyone contributes, and every contribution is valuable. Some design kits, some suggest kits, some write articles, some find parts, some build and share ideas, others ask questions, but every one of you is valuable, and we appreciate your help. Keep it up.

The meeting Sunday was nice. It was hectic in that there was a lot going on. Wayne had the latest prototype of the next Wilderness Radio product, the KC-2 Keyer. This will be a LCD digital readout version of the KC-1 memory keyer with a couple of nice enhancements, a power meter, and a signal strength meter, all in a package about the size of the KC-1. It will fit in any rig that has a vfo that is less than 6.2 MHz,

but if you want to put it in a NorCal 40, you will have to mount it in the lid, as there just isn't room on the front panel, but it will work fine. NorCal is only getting 100 of these kits, and they will be sold locally, as the idea is to do a beta test of the product, and Wilderness needs the hands on feedback of the installations in the various rigs. Wilderness will have the kits available in August as a product line for their company. The NorCal beta test kits will be available at the August meeting of the club. If you want to be in on the beta test, you will have to show up at the meeting.

Jeff Furman had his 49er with his sidetone mod. It works fine Jeff reports, and I have an article from him for the September issue. By the way, there will be over 20 pages of 49er mods in the June issue of QRPP, which is on the way to me from the printer. I will process and mail it as fast as possible. Jeff Anderson brought his now famous Eveready 9V battery rig that was a prize winner in the Dayton building contest. The rig fits inside a 9V battery, HONEST!! He also brought an article complete with schematic. If you are among the stout hearted, the article will be in the September issue of QRPP.

Two members were at their first meeting, Gary Evans from Visalia, and Bill Meacham from Detroit, MI. It is always neat to meet new faces and make new friends.

KI6PU had his St. Louis Tuner there along with Tony Flueshe, both did an outstanding job of building and painting their kits. KI6PU also had his 49er, with several modifications that were on the QRP-L list and Jerry Parker's NorCal Webpage.

I had the new crystals that the club bought with the help of Chuck Adams. Thanks Chuck for finding the source and doing the legwork for us. We have crystals available in HC49 holders (that is the common computer crystal holder with wire leads) in the following frequencies: 7.040 MHz, 7.122 MHz (Novice Frequency), and 10.116 MHz (30 Meters). If you would like to order one or more, the cost is \$3 each, with no discount for multiple orders. Send your order to Doug Hendricks, 862 Frank Ave., Dos Palos, CA 93620. Make check or money order out to Doug Hendricks, NOT NorCal.

Also, the 49er kits are still available. You may now specify either 7.040 or 7.122 crystals, and if you would like both, add \$3 to the cost of the kit. If you use a crystal socket made from a machine ic socket, you can have twice the fun with your 49er. 49er kits, complete with board, all board mounted parts, manual and crystal are \$25 postpaid in the US, and \$30 to DX orders. To order a 49er send your check or money order to Jim Cates, 3241 Eastwood Rd., Sacramento, CA 95821. Please specify the crystal frequency that you wish to have. If no crystal frequency is specified, 7.040 will be shipped.

Don't forget that Field Day is coming up this month. I will be at the Zuni Loop again with the call N6GA. Listen for us and I hope to work all of you. 72, Doug, KI6DS

From owner-qrp-1@lehigh.edu Mon Jun 3 23:05:34 1996
From: David Johnson <djohnson@acpub.duke.edu>
Subject: [9283] KnightLites Round Table
Message-ID: <Pine.SOL.3.91.960603034125.6682A-100000@godzilla3.acpub.duke.edu>

Greetings KnightLites and other QRPers!

This past Sunday we had an interesting and fun time at the KnightLites Round Table! Our 80-meter net is open to all, and we particularly welcome QRP stations. Summer noise levels are making us really dig for the weak signals but the hardy survive!

13 made it into the log, including myself as NCS. Lowest power station checking in successfully was Will, WJ9B, in Greensboro NC, with 100 mW (unless Gary N3GO had a lower power; his sig was way down in the noise at my location). This time 2 Canadians, one via gracious relay from Jim K3QIO. As usual of late, there were several stations heard that didn't make it into the log. Please keep trying! I have all listen and then ask for relays (QSP?), and conditions change even during a net session, so don't give up!

Here is the log:

WA4NID	ncs, 5 W
KB4MNG	459, 5 W
AE4IC	569, 5 W, G5RV
KC4URI	589
K3QIO	459, 5 W
VE3REP	via K3QIO relay (thanks!)
N3GO	249, 200 mW ???
VE3VAW	
WY1W	579, 3 (4?) W
KS4VX	569, 1 W, G5RV
N9SD	

KD4BTH copied KK4BTH but must be Sam (?)
WJ9B 579, 100 mW !!!

I hope you can join us next Sunday evening at 10 pm local
eastern time (0200 UTC), on 3710 kHz. Pound some brass
with the KnightLites!

72,

Dave

David W. Johnson, Ph.D.	QRP ARCI 6546
Amateur Radio Extra WA4NID	G-QRP 4864
email: djohnson@acpub.duke.edu	NorCal 355
packet: WA4NID@KB4WGA.#DUR.NC.USA.NOAM	TSRAC 3482

From owner-qrp-1@lehigh.edu Mon Jun 3 23:05:34 1996
From: Glen Leinweber <leinwebe@mcmail.CIS.McMaster.CA>
Subject: [9300] measuring QRP output power
Message-ID: <1996Jun03.120936-0400@[130.113.234.7]>

In <m0uQ7Ex-0001H8C@aoc.state.nc.us>,
Brian.S.Allen%NCAOCISD@smtpgw.aoc.state.nc.us wrote:
>I am interested in measureing the output of a qrp transmitter but do not have
>access to a sensitive wattmeter. Is there a procedure to measure the power
>output without using a meter????
>

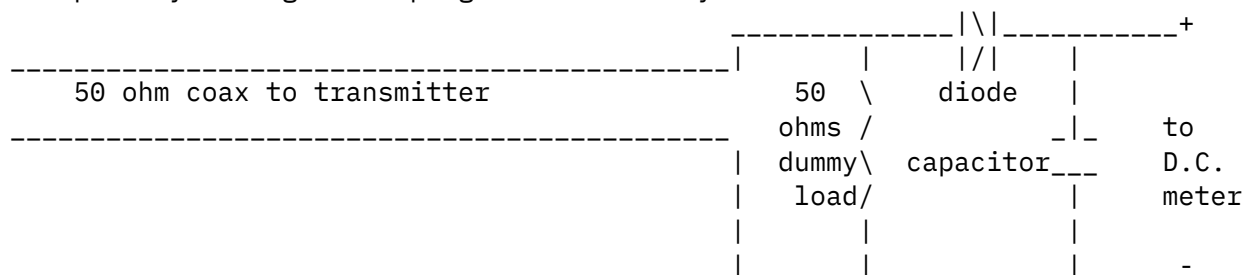
Brian,

Sounds like you need to start making some basic test equipment.
A dummy load with diode rectifier attached is a good place to start.
Jim Fitton gave a Radio Shack source recently of some 100 ohm metal-film
resistors that should work well as a dummy load - two in parallel gets
you a nice 50 ohm dummy load.

You've gotta be careful NOT to use wire-wound resistors for your
dummy load. Lots of power resistors are around that look tempting
to use, but have too much inductance because they use resistance wire
wrapped on a ceramic tube. Carbon composition - OK. Metal film - OK.

I use a buncha 2 watt carbon composition resistors in parallel
to make my load. One has four 220 ohm resistors in parallel, (55 ohms)
and an extra 560 ohm resistor added in parallel to bring it down to
exactly 50 ohms. Resistor leads as short as possible. If you can find
these 220 ohm resistors with a 1W power rating, this should do for a
QRP rig. You oughta derate the manufacturers power rating a little when
applying these resistors as a dummy-load. Short key-down periods helps.

the power your rig is dumping into the dummy load. Here's the circuit:



the diode can be a small signal silicon diode like the common 1N914 or 1N4148. Don't use a rectifier diode like a 1N4000 series - they're too slow to respond to high frequencies. Or if you're into VERY low power QRPp, then try a germanium diode, like 1N34. It'll give better accuracy. The capacitor value isn't too critical, anything larger than .001uf: a disk ceramic is good.

The D.C. voltage measured across the capacitor is proportional to the square root of the output power from your transmitter. With a little math, you can find the transmitter output power in watts:

V_p = voltage across the capacitor

W = Power output in watts from your transmitter.

$$W = (V_p * V_p) / 100$$

An example: capacitor voltage measured is 22 volts
your rig is putting out 4.84 watts

Your rig will actually be putting out a little more power, since the diode requires a little extra voltage to forward bias - subtracting from the voltage your meter measures.

EVERYone should have a device like this for basic rig check-out. Its a great simple project if you've never done homebrew stuff before.

From owner-qrp-1@lehigh.edu Mon Jun 3 23:05:34 1996
From: adams@chuck.dallas.sgi.com (chuck adams)
Subject: [9281] Misc Update
Message-ID: <199606030506.FAA10171@chuck.dallas.sgi.com>

1. Lost the antenna at K5FO yesterday due to wind and a limb crashing down upon it. Found the MFJ-941C halfway up the wall still attached to the 300 ohm ladderline which was attempting a "great escape". I got very lucky that the GM-30 wasn't yanked from the desk also. No damage and I got the antenna

back up in 30 minutes. Close call.

2. I got email last week while in MtView. I have not forgotten anyone, just delayed in getting the info and responding. Hold on. Help is on the way. I do tend to get quite a bit of mail, both personal and professional during the week. The job comes first.

3. Anyone have access to the technology to carefully remove the cover to a HC-49U crystal case without destroying the crystal inside? A photo on a web page would be nice. :-)

Thanks to the individual who sent me the 49uH rotary inductor. It is a beauty and will go into a tuner by the end of the week. :-) You did that just to give me something else to do, didn't you? :-)

4. Wanted info on reciprocal licensing for the Bahamas? Anyone done this?

Thanks,

dit dit

--

Chuck Adams (K5FO CP-60) adams@sgi.com

K5FO Tmps 1996 Qs=021 States=15 Confirmed=07 DX=01

AZ CA CO FL IL IN MI OK OR SD TN TX UT WI WY

From owner-qrp-l@lehigh.edu Mon Jun 3 23:05:34 1996

From: "Phil Sikes" <psikes@whidbey.net>

Subject: [9282] More WWW sites

Message-ID: <199606030526.WAA28690@islander.whidbey.net>

Hello to the group. I have found two really great sites dealing with keys, keyers, paddles, bugs, history and just about anything else to do with morse. Take a look at:

<http://fohnix.metronet.com/~nmcewen/ref.html>

and

<http://www.chss.montclair.edu/~pererat/telegraph.html>

I got lost in these two for quite a while.

Also, the Northwest convention "SEAPAC" was great again this year.

72 - Phil

Amateur Radio Station
KJ7NS
email: psikes@whidbey.net

From owner-qrp-l@lehigh.edu Mon Jun 3 23:05:34 1996
From: Allen Jones <ajones@adsnet.com>
Subject: [9316] NC 40A Review QST 6/96
Message-ID: <199606032034.PAA16573@alice.adsnet.com>

I took advantage of the discount offered by Wilderness at the Dayton Hamvention and ordered one of the NC 40A kits which I received via priority mail today.

In Rich Arland's review of the Wilderness NorCal 40A he makes reference to a couple of mods he picked up from QRPP. The one I'm interested in has to do with the two small-diameter brass rods (tapped and drilled for hardware) he installed beneath the PC board for added strength to the end panels. I haven't started construction yet but I am assuming the front and rear panels are only being held by the board mounted jacks and controls? Has anyone else done this to their NC 40A and is it worthwhile?

72/3 de Allen, K9DZE

=====
Allen Jones K9DZE ajones@adsnet.com
Michigan City, Indiana EN61nq
ARCI G-QRP NorCal QRP-L #112
=====

From owner-qrp-l@lehigh.edu Mon Jun 3 23:05:34 1996
From: g0rtx@mtlgw.ampr.org
Subject: [9333] QRP kits in EUROPE? Where?
Message-ID: <6110@mtlgw.ampr.org>

From: Ravi / G0RTX
Home PBBS: G0RTX@HB9IAP.SROM.CHE.EU [Geneva - JN36BE - 45 6N 6 1E]
Ham Email: G0RTX@MTLGW.AMPR.ORG (or less consulted) G0RTX@SUGARLAND.AMPR.ORG

TO:

Hello,
I am looking for kit manufacturers and/or distributors in Europe. We hear such a lot abt. the great North American kit manufacturers and at times I want to purchase a kit or two only to be discouraged by the STEEP fret costs.

If anyone knows kit distributors in England, France, Germany or Switzerland pse
reply... Thanks!
73s from Ravi.

From owner-qrp-l@lehigh.edu Mon Jun 3 23:05:34 1996
From: wa5whn@ix.netcom.com (Jay Miller)
Subject: [9297] QRP-L/Kits/Comments
Message-ID: <199606031528.IAA19570@dfw-ix1.ix.netcom.com>

Dear Fellow QRP Enthusists,

Chuck, K5FO is right, please don't trash this Group. There is a wealth
of talent, and community knowledge here, as a small segment (Growing
fast) of the Amateur Radio Community. Hmmm, Chuck leaves, Group
escalates to Newsgroup Mentality, Chuck returns, we act like Adults.
What happens when Nils leaves ? ;-)

What pleases me even more, the number & quality of Vendors, in this
Group. There is an ill wind blowing in this Country. You are starting
to see the beginnings of it now. Kenwood, Icom, Ten-Tec, et al, have to
sell products or go out of business. How many of You have actually run
a business ? I mean where You live & die, but the end of the day sales,
and it is You working for Yourself ?? Hmmm, did not think so. Try it
sometime (Egads, I sound like W2NSD/1, help me,...) Seriously, we
(Consumers) are forcing these Vendors to live on less than 5% profit
margins. In order to do that, they need to grow their volume of sales
in other markets. You see this very same mentality in the Personal
Computer Market too. The something for nothing attitude, which degrades
& devalues the product & services. I would be the last Person to tell
anyone what to buy, but if You like what You see, purchase it.
Otherwise, we force these Vendors to seek other markets, such as
selling these Xcvrs into the CB Community, and they will, despite the
FCC. The proliferation, of this CB mode, unregulated, is showing up in
other Countries right now. We either start working together, or come
the turn of the Century, we will loose it all.

How many of You actually tell Your' Employer that Your' services are
worth less ? Actually ask Your' employer to NOT pay You as much ? That
is what we are asking of Our Vendors in this Market. One thing is to
have technology & volume of sales drive the business, and it does,
another is the enmass attitude of let's starve all of them. Let's not.
Let's reward those who meet our needs. I do applaud OHR, Small Wonder's
Lab, all of them, when I have called and asked for a large Group
Discount, where I was going to save them money, buy shipping to one
address, 1 or 2 product lines, with an order in excess of 20+ xcvs,

they did not mind, but when one Individual calls up and asks for a 30% discount, when the margins are barely 5%, they exit the market. I would. So, come on, I want to see the show of hands as to how many People actually tell their Bosses, that they are paid too much ?? That's what I had thought.

BTW, I was visiting with NA5N, Paul Harden, and I was impressed with the GQ-20 kit that I had seen, that Paul is building. He had tested a GQ-40, the results are in his Book (QRPBook@aol.com). This xcvr kit had come from the UK (Kanga-N8ET). Warning, this kit is not for the first time kit builder.

72...Jay, WA5WHN, (Send
Rain/Hail/Snow/Hurricanes)

Albuquerque (Hot & very dry) , New Mexico

From owner-qrp-1@lehigh.edu Mon Jun 3 23:05:34 1996
From: GREGOIRE@endor.com (ERNEST GREGOIRE)
Subject: [9315] QRP/RTTY/ON A QRP+
Message-ID: <199606032014.QAA59994@nss2.CC.Lehigh.EDU>

Hello Gang,

What to do next?

I am homing in on my DXCC/qrp/@<sun cycle22. So it occurred to me that I would be wanting to branch out in this quest. RTTY comes to mind.

I'd like to hear from those folks that have done some RTTY,AMTOR, in QRP fashion. I have a QRP+ and want to install some AFSK jacks on the rear panel. Some of you have done this and I want to gain from the benefit of your experiences. I figure this will be a good time to replace the power jack that has given me so much trouble in the past.

I might as well do all of the cutting and fileing while the boards are all out of the box, so if you can suggest any other mods here Id be most appreciative.

BTW, I have not recieved that nifty RF gain adjustment mod from Index yet. I'll post it here as soon as I get it.

73

de AA1IK

Ernie

de AA1IK N.E.-QRP-C. # 202 (Lead by example, It is better to)
 QRP-L member #95. (pull a string than it is to push it.)

Ernie Gregoire
RR 1 Box 221
Canaan, NH. 03741

New England QRP Club, information
available on request by sending me a
S.A.S.E. or via E-mail.

e-mail : GREGOIRE@ENDOR.COM
packet : AA1IK@WA1WOK.FN43FE.NH.USA

From owner-qrp-l@lehigh.edu Mon Jun 3 23:05:34 1996
From: David Werner <aa9ol@execpc.com>
Subject: [9291] Radio Shack DSP \$30 ---SOLD---
Message-ID: <31B2E52C.332A@execpc.com>

The unit has been sold.

Thank you,

Dave
aa9ol@execpc.com

From owner-qrp-l@lehigh.edu Mon Jun 3 23:05:34 1996
From: talljazz@teleport.com (Dan Presley)
Subject: [9310] Seapac convention
Message-ID: <v01530500add8d0b09d8d@[206.163.120.106]>

Just a brief note about the NW convention in Seaside,Or (531-6/2). I attended a seminar by Jon Liebenrood,K7R0, the designer of the Norcal Cascade ssb kit.It was great to hear the process of a concept being developed into a working radio. There was also a gentleman there (I missed his name) who designed a really slick 75 mtr ssb tranciever based on the Rick Littlefield boards. It was also valuable as a meeting place for QRPers in the NW area, and an informal group (ala Norcal) may be springing up in

the Portland metro area. If you're interested you can email me for details.

Also present at the convention was the president of the NW Qrp club (headquartered out of Wash.) -sounds like ther're planning a great Field Day event in Bay City,Wa; and the Index lab folks with the QRP++-they are designing a companion unit that will include a tuner & other goodies.

Hope to hear from other Oregon/Wash QRP'ers!

Dan N7CQR

From owner-qrp-1@lehigh.edu Mon Jun 3 23:05:34 1996

From: N5EM@aol.com

Subject: [9338] Spartan Sprint

Message-ID: <960603224144_317797364@emout16.mail.aol.com>

Gang,

I hope that SOMEWHERE in North America the QRN is low enough to hear a QRP signal. It certainly isn't in South Texas.

See you in JULY.

Ed,N5EM

From owner-qrp-1@lehigh.edu Mon Jun 3 23:05:34 1996

From: lve1@inel.gov (Larry V East)

Subject: [9303] St. Louis Tuner comments

Message-ID: <2.2.16.19960603163559.27c7a89a@134.20.173.29>

Well, in between cutting grass, killing weeds, fixing sprinklers, cleaning the basement (under dire threats of bodily harm from the XYL) and working on my 1980 vintage Peugeot (car, not bike...) I managed to (finally!) finish my St. Louis tuner this weekend. Did anyone else find it almost impossible to make a decent solder connection to the toggle switches supplied with the kit without melting the innards of the little &'s? I finally threw the switches away and used a couple from my "spare parts box" (can't call it a "junk box" or the XYL would insist I throw it out!).

As mentioned in a post late last week, I mounted the four dummy load resistors "off board" on a home-made heat brass heat sink attached to the bottom cover. I get a little indication of reflected power with both the internal load and an external load (which, by the way, gives no indication

of reflected power when connected directly to the output of my WM-1 Wattmeter). I still think it may be a problem with the long ground run on the PC board, or maybe the long unshielded output wire going from the front panel to the back panel -- hope to do some playing around with it tonight.

72, Larry W1HUE/7

From owner-qrp-1@lehigh.edu Mon Jun 3 23:05:34 1996
From: moyle@essc.psu.edu (Al Moyle)
Subject: [9325] SW-30 HELP!!
Message-ID: <9606040022.AA00543@seismic.geosc.psu.edu>

OK, all of you gurus out there ... I'd really appreciate some help with a problem I'm having with my SW-30. I recently decided that it is time to complete this project. After all, I built the board almost a year ago and all I need to do is put it in a proper box. Besides, I decided that I have to finish something before I can start on all the neat kits I bought at Dayton ;-).

The problem is that, on transmit, as I turn the RF drive pot (R2) up, everything seems to break into oscillation. Looking at the output on my WM-1, this seems to happen with about 1 watt of output. The first sign of trouble is that the audio amplifier starts motorboating (I think). If I look at the output of the rig by connecting my scope across the dummy load, it looks ok until the oscillation starts ... then a sort of "kink" appears in the waveform. The output of the driver (Q5) doesn't look that good to begin with (high frequency stuff superimposed on top of the good stuff) and gets really ugly when the thing starts oscillating. The output of Q4 shows similar nasty things.

My first thought was that it is some sort of ground loop problem. Right now I have the board mounted over a piece of unetched circuit board material using aluminum standoffs to complete the ground connection between the SW-30 and the ground plane ... all ground connections are soldered to the piece of circuit board material. Similar results were obtained with the SW-30 mounted in a re-cycled, steel RS-232 switch box. The funny thing is, I don't remember this sort of behavior right after I completed the rig and mounted it on the scrap of circuit board material ... and I am pretty sure I would have noticed, it's pretty startling when the audio amp takes off like that :-).

Anyway, any help and advice would be much appreciated. Tnx in advance es

72,

Al Moyle N3KFL

From owner-qrp-1@lehigh.edu Mon Jun 3 23:05:34 1996
From: g0rtx@mtlgw.ampr.org
Subject: [9330] Tnx. those who helped...
Message-ID: <6101@mtlgw.ampr.org>

From: Ravi / G0RTX
Home PBBS: G0RTX@HB9IAP.SROM.CHE.EU [Geneva - JN36BE - 45 6N 6 1E]
Ham Email: G0RTX@MTLGW.AMPR.ORG (or less consulted) G0RTX@SUGARLAND.AMPR.ORG

TO:

Hello everyone,

Thanks to those who sent me mail welcoming me to this list/forum and also gave me tips for playing QRP... Yes, Europe is a bit far... but, you never know!

QRP OMs are in my opinion the 'la creme de la creme' of ham-radio... atleast where the comparison extends to radio etiquette... Lets keep it this way!

73s from Ravi.

From owner-qrp-1@lehigh.edu Mon Jun 3 23:05:34 1996
From: g0rtx@mtlgw.ampr.org
Subject: [9331] WANT SOLAR PANEL INFO
Message-ID: <6107@mtlgw.ampr.org>

From: Ravi / G0RTX
Home PBBS: G0RTX@HB9IAP.SROM.CHE.EU [Geneva - JN36BE - 45 6N 6 1E]
Ham Email: G0RTX@MTLGW.AMPR.ORG (or less consulted) G0RTX@SUGARLAND.AMPR.ORG

TO:

Hello everyone,

I am on the look-out for a solar photo-voltaic array capable of developing a current of between 1 to 3 amperes (12 volts). If anyone has addresses where they are found either as second-hand/surplus material, I am most interested.

Anyone who can give me info. & tips will find in me an excellent listener!

73s from Ravi.

From owner-qrp-1@lehigh.edu Mon Jun 3 23:05:34 1996
From: g0rtx@mtlgw.ampr.org
Subject: [9339] WANT: VLF/LF TRCV info.
Message-ID: <6135@mtlgw.ampr.org>

From: Ravi / G0RTX
Home PBBS: G0RTX@HB9IAP.SROM.CHE.EU [Geneva - JN36BE - 45 6N 6 1E]
Ham Email: G0RTX@MTLGW.AMPR.ORG (or less consulted) G0RTX@SUGARLAND.AMPR.ORG

TO: LOW FREQUENCY radio communications

Hello,

I am looking for tips/projects from those of you who have constructed trcvs for very low frequency communications. I have already received some mail from OMs but unfortunately none were able to send me circuit details...

So, if any of you have tranceiver diagrams, kit supplier addresses and tips for low-frequency communications, do drop me a line.

Thanks.
73s from Ravi.

From owner-qrp-1@lehigh.edu Mon Jun 3 23:05:34 1996
From: adams@chuck.dallas.sgi.com (chuck adams)
Subject: [9317] WBL Designs
Message-ID: <199606032045.UAA14219@chuck.dallas.sgi.com>

Gang,

A number of DX, i.e. outta the USofA, members to the list asked for a non-800 number for Stan Hails, W9WBL, manufacturer of the WBL Designs Iambic paddle V2L at \$99 + S&H (which is \$6 for within the US).

Well I just got off the phone with Stan and here it is.

(317) 291-1738 during 9-5 EST, but you might try later.
Like all people who work for themselves it's nearly a

24 hr a day job. :-)

Stan brags that his paddle will give the user an additional 5 to 10 wpm on their sending. He says he is biased. :-)
True, but I found that I easily picked up that much. Now can do over 50wpm with the small amount of practice since I've had the thing.

One thing that I did not know about was that the CMOS III board size may have changed a couple of times. I'm taking a survey (YAS - yet another survey). If you have yours (CMOS III) where you can measure it, send me the dimensions and please please don't post to the list. :-) I'll report if there is indeedy a change in dimensions. I did note that the CMOS II is significantly larger than the III. Also if you remember how long you've had the III, let me know.

See ya on tonight at 20wpm for the test.

This posting for information only. I am not nor have I been paid for advertising for anyone. Just another satisfied customer.

dit dit

Any novices want a "foxhunt" at 7.122MHz by listening to QRP code at 13 to 18 wpm? A combo foxhunt and code-practice session? We may have to wait until late Sept, but we are checking for interest in same at this time.

--
Chuck Adams (K5FO CP-60) adams@sgi.com
K5FO TMPS 1996 Qs=021 States=15 Confirmed=07 DX=01
AZ CA CO FL IL IN MI OK OR SD TN TX UT WI WY

From owner-qrp-1@lehigh.edu Mon Jun 3 23:05:34 1996
From: torell@sicom.com (Kent Torell)
Subject: [9296] weekly prop forecast
Message-ID: <v02130500add4cc0ab213@[192.91.202.41]>

Looks like a repeat of this week...no real geomagnetic storms, quiet sun, with solar flux running between 65 and 70.

We just got an old chirpsounder receiver up and running for some hf tests next week. We monitor three paths; the transmitters in Hawaii, Palo Alto

(intermittent), and Utah. Looks like constant sporadic E over the west here...Usually fades out by 18 Mhz, but is constant throughout the day. So, I guess people should be seeing relatively solid 1000 Km contacts. We are working on connecting a recording device to this old boatanchor (just kidding...no tubes, but it IS old, and heavy) so we can see what happens overnight. Nice path to Hawaii this morning, from around 6 to 12 Mhz!

Don't forget the Adventure radio sprint on Monday nite!

Kent Torell torell@sicom.com 602-483-2867 x40
SICOM 7585 E. Redfield, #202 Scottsdale, AZ 85260
AB7OA Tmps 1996 Qs=009 States=08 Confirmed=01 DX=00
AZ CO HI KS OK OR TX WA

From owner-qrp-1@lehigh.edu Mon Jun 3 23:05:34 1996
From: g0rtx@mtlgw.ampr.org
Subject: [9334] What is G-QRP Email addr?
Message-ID: <6115@mtlgw.ampr.org>

From: Ravi / G0RTX
Home PBBS: G0RTX@HB9IAP.SROM.CHE.EU [Geneva - JN36BE - 45 6N 6 1E]
Ham Email: G0RTX@MTLGW.AMPR.ORG (or less consulted) G0RTX@SUGARLAND.AMPR.ORG

TO: ALL

Hello OM,
If someone has the G-QRP Email addr & their forum's list server addr, pse give me a copy. Thanks.
73s from Ravi.

From owner-qrp-1@lehigh.edu Mon Jun 3 23:05:34 1996
From: Bob_Tellefsen-CNSE97@email.mot.com
Subject: [9313] www sites for qrp
Message-ID: <M880711.002.fsnn3.1.960603182838Z.CC-MAIL*/OU=LMPCC10/OU=ILBE/PRMD=MOT/ADMD=MOT/C=US/@MHS>

My thanks to all those who have replied to my query with their favorite ham/qrp sites. Particularly Art Searle, WU2K. With all those sites you've been checking out, Art, how do you find time to ham?
72/73 to all

BobT N6WG

From owner-qrp-l@lehigh.edu Mon Jun 3 23:05:34 1996
From: "Mark S. Adams" <msadams@acsu.buffalo.edu>
Subject: [9285] Re: Altoids and 80M Loops
Message-ID: <31B30653.353A@acsu.buffalo.edu>

Hi All,

Does anyone have the heart to tell Dave, G0DJA, where Altoids are made?

--

72's de Mark/N2VPK

TMPS 1996 Q's=41 States=19 Confirmed=00 DX=05
AL CA CO CT IN FL KY MA MI MD ME NC NY PA SC SD TN TX WI
CT3 VE1 6W1 OZ7 HC1

From owner-qrp-l@lehigh.edu Mon Jun 3 23:05:34 1996
From: Stephen John Farthing <stephen@stevef.demon.co.uk>
Subject: [9309] Re: Altoids and 80M Loops
Message-ID: <qYZ+ZAAuixsxEwI9@stevef.demon.co.uk>

In message <960603120201Z*/G=Dave/S=Ackrill/O=WESTWOOD45/PRMD=POWERGEN/A
DMD=CWMAIL/C=GB/@MHS>, Dave.Ackrill@WESTWOOD45.powergen.co.uk writes

>
> Hello everyone at the QRP-L List,
>
> As a new user, let me introduce myself:-
>
> Name = Dave
> Callsign = G0DJA
> G-QRP Member No. = 3247
>
> So, down to the reasons for this message.
>
> 1st, as a Limey, what is/are "Altoids" (sound painful!) and what use
> are they to QRP, or is it the box?

Altoids are mints which come in a tinsplate box. I have never seen them for sale in England but I believe both Nuttalls and Marks and Spencers do a "Badge Engineered" version. The M&S one is green. Doug Hendricks should be able to confirm if the boxes are the same as I sent him a load last month for fellow NORCAL members who might not find the altoids boxes easy to come by.

--

Stephen John Farthing MBCS G0XAR
Melksham, Wiltshire UK
RSGB G-QRP 7766

From owner-qrp-1@lehigh.edu Mon Jun 3 23:05:34 1996
From: "Robert J. Gobrick" <rgobrick@nfld.com>
Subject: [9324] Re: Altoids and 80M Loops
Message-ID: <2.2.32.19960602225135.00a12a34@public.compusult.nf.ca>

Hi Dave,

Well it takes another "Brit" to explain this uniquely American phenomena
(Great Britain candy mint):

As reported by Rev George Dobbs G3RJV in the June 1996 issue of RadCom
(George's QRP column) I quote from his reporting of the "49ers in Altoids
Boxes" :

"My checking in to the American QRP list on Internet seems to show that a
lot of 49er transceivers have been built for the event and builders are
seeking novel packages and cases to enhance their chances of winning the
event (Dayton NorCal QRP building contest). Currently the most popular case
is an Altoids box. This small 95X60X20mm tin plate container for this
singularly American product is being avidly sought to house the 49er. QRP
is certainly a distinctive area of our hobby!"

By the way for the British non-believers my Altoids tin in front of me reads
"The Original Celebrated CURIOSLY STRONG PEPPERMINTS ALTOIDS". Made in
Great Britain and distributed by Callard & Bowser-Suchard Inc, Elmsford New
York (home of the great American chili and salsa - that's an inside American
joke).

So there you have it - a British product duped on to the gullible American
market-place and yes the tins make GREAT 49er transceiver cases - hi. Don't
you wish you had some there - maybe we can export them to you all!

73/72 Bob V01DRB/WA6ERB

At 13:02 6/3/96 +0100, you wrote:

>
> Hello everyone at the QRP-L List,
>
> As a new user, let me introduce myself:-

>
> Name = Dave
> Callsign = G0DJA
> G-QRP Member No. = 3247
>
> So, down to the reasons for this message.
>
> 1st, as a Limey, what is/are "Altoids" (sound painful!) and what use
> are they to QRP, or is it the box? Over here an OXO box was used once
> upon a time. OXO is a company who make cubes of gravy stock granules
> (still available) but they used to come in a small metal box. Others
> used tobacco tins, or cigar boxes. Somehow, those new plastic pouches
> don't seem to work so well ;-)
> 72 de Dave (G0DJA)
>
>

```
-----  
| Bob Gobrick - VO1DRB/WA6ERB/VE2DRB - Newfoundland, Canada |  
| QRPer Galore - ARCI, GQRP, NORCAL, NEQRP, COQRP, MIQRP, NWQRP |  
| Internet:      rgobrick@nfld.com |  
|                bgobrick@nlnet.nf.ca |  
| Compuserve:   70466.1405@compuserve.com |  
|-----|
```

From owner-qrp-l@lehigh.edu Mon Jun 3 23:05:34 1996
From: Mike Cloud <cloudm@mhsgate.meth-mem.org>
Subject: [9295] RE: bnc to pl259
Message-ID: <74B3B23101172C16@mhsgate.meth-mem.org>

>Date: 31-May-96 13:31:35 -0600

> From: "richard wilkerson" <richqrp@msn.com>

>
>Silly question I know but...do they make a " connector " from the bnc on
>the back of my rig to a pl 259??? I know and have the bnc to pl259 that
>is a male bnc and a male pl 259. do they make it with female ends???

>
Coincidentally I was looking thru the radio junk box this weekend and found 2 of
the
connector/adapters you are talking about. They have female BNC ends and female
(so239?) ends.

Not sure where/when/why I picked them up but had to be RS or the connector dude at
a hamfest. I
have a penchant (sic?) for avoiding adapters every since someone told me that I
lost 1/2 db at

every instance. 73/72 cul de Mike, KR4IT

From owner-qrp-1@lehigh.edu Mon Jun 3 23:05:34 1996
From: "Mark S. Adams" <msadams@acsu.buffalo.edu>
Subject: [9289] Re: Delta Loop Info Needed.
Message-ID: <31B30BA0.4C99@acsu.buffalo.edu>

Hi Jim and Gang,

>Thanks for the info. Question. I have received two replies that suggest I
>need to feed it 1/2 way up the side for vertical polarization. Yours is 5
>feet up.

I believe that feeding a delta halfway up a side will yield horizontal polarization, not vertical. See Doug Demaw's article on "Delta Loops at Low Height" from the 10/84 QST. I would fax it to you but I do not have a fax machine in the home office. It, along with the delta loop info in OH2UN's? book, "Low Band DX'ing" will clear all these questions up quite well. In the DXing book John says to feed the loop about ____ lamda (I do not remember the exact value, nor do I own the book) up from a lower corner for best low angle radiation. When I had my antenna horizontally polarized with the feed at the apex I heard/worked NO dx. When I moved it to just above the lower corner I struck gold. Rich, VE6GK? suggest a better sig:noise ratio for the horizontal case hence better receive performance. This did not work for me in practice. Also, with a tilted loop the polaraziation is probably mixed so the number of variables is too many to account for.

If you cannot decide, is it possible to construct the antenna so you can simply rotate the wire after taking tension off loop? You could check both cases and see for yourself. I could not do this easily because my chimney is in the way. I ran for 3 months feeding the apex and thereafter feeding abt 5' up from a lower corner.

>Also, I am inferring from replies that the feed point is about 200 ohms
>and a 4:1 balun would work for a 40 mtr monoband antenna. Do you agree?

YUP! If I were monobanding it I would use a 4:1 and coax fer sure.

>Later, I may want to try the 450 ohm feedline. Trouble is I have never
>used it and would have to find out where to buy it, how to run it into the
>house, how to tune it, etc. Coax would be best for right now. Comments?

I had the same trouble. I finally just bought some from the Wireman (ad in QST). I had some ceramic insulators with spikes that I hammered into the side of the house at 10' intervals as needed (the XYL asked many questions during

installation) and ran into my basement shack thru a tiny vent window in the glass block that I replaced with a plexiglass panel. The panel has a slot for the twinlead and a bulkhead connector for coax.

--

72's de Mark/N2VPK

TMPS 1996 Q's=41 States=19 Confirmed=00 DX=05
AL CA CO CT IN FL KY MA MI MD ME NC NY PA SC SD TN TX WI
CT3 VE1 6W1 OZ7 HC1

From owner-qrp-1@lehigh.edu Mon Jun 3 23:05:34 1996
From: "L. B. Cebik" <cebik@utkux.utcc.utk.edu>
Subject: [9332] Re: Delta loops
Message-ID: <Pine.SOL.3.91.960603213456.28406C-100000@utkux4.utcc.utk.edu>

On Mon, 3 Jun 1996, NONE <wynnt@utkux.utcc.utk.edu> wrote:

> almost a very nice paper on deltas, but you left out two important
> items from the parametric mix. Please submit again with permutations
> and consideration for:

Thank you, but no, thank you.

W4RNL

From owner-qrp-1@lehigh.edu Mon Jun 3 23:05:34 1996
From: NONE <wynnt@utkux.utcc.utk.edu>
Subject: [9318] Re: Delta loops (long, erase no
Message-ID: <Pine.SOL.3.91.960603172023.16070A-100000@utkux4.utcc.utk.edu>

L. B.,

almost a very nice paper on deltas, but you left out two important items from the parametric mix. Please submit again with permutations and consideration for:

1. the tilt of the plane of the delta out of the vertical plane for 10, 20, and 30 degrees for both the horizontal low and horizontal high;
2. rotation of the plane of the delta within the vertical plane with horizontal vertical and vertical (apex) horizontal.

Both these parameters will be useful to those constructors who can't arrive at the perfect equilateral triangle in a plumb condition.

-wynnt

From owner-qrp-1@lehigh.edu Mon Jun 3 23:05:34 1996
From: bkmak@airmail.net (Bob Kmak)
Subject: [9326] Re: GRC 174, 1.5v filaments & a box of other stuff
Message-ID: <m0uQkFb-000F9YC@mail.airmail.net>

Nils,

Do you remember Nuvistors? They were kinda like little tubes, but in metal cans. I may be daft, but I seem to remember that somebody was selling something like a conversion kit for Collins gear. Who knows, maybe there is something like that for the R-174. It makes me sad to see great old radios die...

73,

Bob KC5RAS

From owner-qrp-1@lehigh.edu Mon Jun 3 23:05:34 1996
From: JDuffy@aol.com
Subject: [9290] Re: Heathkit Quality Kits Today
Message-ID: <960603091623_317079143@emout12.mail.aol.com>

In a message dated 96-06-03 00:23:50 EDT, you write:

It's great to encourage vendors to offer products for QRPers. However, it makes no sense to encourage them to market products that will not be purchased by QRPers. If Ten-Tec brings out yet another 40 meter CW rig, how many will buy it? If they offered something unique and different, how many will buy it?

The one thing I do not want to see happen is for Ten-Tec to offer a me too product that produces limited sales and discourages them on QRP products. Lets tell them no thanks on yet another 40 meter rig, but how about offering ?????? .

Just MHO.

Regards,

Duffy - WB8NUT

> I welcome new players to the game. It is their money that they
>are investing. Let them decide how to spend it. They are taking the
>risk so they get to call the shots. Encourage, rather than discourage.
> Welcome to the game TenTec, I am anxious to see your new product. I
>don't know if I will buy it or not, but I did buy and enjoy building
>your 9 band Regen Receiver, 4 band Regen, Ham Bands Receiver, Keyer Kit,
>and Noise Bridge. 72, Doug, KI6DS
>
>

From owner-qrp-l@lehigh.edu Mon Jun 3 23:05:34 1996
From: Monte Stark <ku7y@sage.dri.edu>
Subject: [9292] Re: Heathkit Quality Kits Today
Message-ID: <Pine.SUN.3.90.960603070421.18560A-1000000@vortex.sage.dri.edu>

Doug,

Well said!

73, Ron,

.....KU7Y.....ARCI #8829.....Monte "Ron" Stark.....
....ku7y@sage.dri.edu.....Washoe Lake, Nevada....
....QRP-L #17...ARS #49...NorCal #330.....NRA LIFE.....

From owner-qrp-l@lehigh.edu Mon Jun 3 23:05:34 1996
From: Byron8LCZ@aol.com
Subject: [9329] Re: Heathkit Quality Kits Today
Message-ID: <960603211614_548647746@emout08.mail.aol.com>

In a message dated 96-06-03 09:21:30 EDT, you write:

>Subj: Re: Heathkit Quality Kits Today
>Date: 96-06-03 09:21:30 EDT
>From: JDuffy@aol.com

>Sender: owner-qrp-1@Lehigh.EDU
>Reply-to: JDuffy@aol.com
>To: qrp-1@Lehigh.EDU (Low Power Amateur Radio Discussion)
>
>In a message dated 96-06-03 00:23:50 EDT, you write:
>
>It's great to encourage vendors to offer products for QRPers. However, it
>makes no sense to encourage them to market products that will not be
>purchased by QRPers. If Ten-Tec brings out yet another 40 meter CW rig, how
>many will buy it? If they offered something unique and different, how many
>will buy it?
>
>The one thing I do not want to see happen is for Ten-Tec to offer a me too
>product that produces limited sales and discourages them on QRP products.
> Lets tell them no thanks on yet another 40 meter rig, but how about
offering
>????? .
>
>Just MHO.
>Regards,
>Duffy - WB8NUT
>

Hi Duffy,

You make it sound like every QRP'er in the world is on this list and knows about NorCal, Oak Hills, Small Wonder Labs, etc. Many don't have any affiliation with any QRP group, they are closet QRP'ers, many are KW SSB ops looking for new challenges and many are brand new hams with TVI problems. There's a vast untapped world of hams looking for more info on QRP or new frontiers in ham radio. I'm sure Ten Tec will reach many of them, thru their ads in national mags and word of mouth from most any ham in North America.

I think a 40m kit rig is the best place to start, and I have more than my share of noise on 40, living in the Detroit area. The second best choice would be 30m, then 20m. The higher the freq, the lower the band noise and the easier it is to hear weak signals.(and the shorter the band openings !)

The next point is: Perhaps Ten Tec will come up with a new innovation, that everyone here will drool over, until they get one too. The LCD and LED freq readouts, LCD RF output, LCD bar graph S-meter (from NorCal) are just now appearing. Ten Tec could have any of those features in mind. maybe even a successor to the Argonaut 505/509/515 series.

Perhaps a "72" model. Less costly than the Argonaut 2 (no DDS) but unusually quiet receiver using crystal mixing (like the Omni-5). A multi-band rig would sure be well received, perhaps to compete with the QRP Plus or Oak Hills Classic. But purely CW, none of that phone stuff. With built in iambic keyer

and 18 memories (CMOS-3 keyer), maybe even a built in antenna tuner, 1000 and 500 Hz crystal filters. LCD freq readout. Digital S-meter/Pwr meter. Maybe they'll buy the KC-2 design from Wayne Burdick. So far, no one has produced a complete station in a box for truly portable operations. Most of the building blocks are out there. All of these separate boxes and cables are a pain for truly seamless portable operation.

Perhaps in the 600 dollar range ? An eight band QRP CW rig for those that take the sport seriously. Power continuously variable from 0 to 10 watts (for those high SWR antennas, that just won't tune)

Who knows what they might come up with ? I say, they can do it !!!!!

Maybe I better start saving my money.....

72, Byron WA8LCZ Detroit

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=====
WA8LCZ TMPS 1996 Qs=112 States=42 2X-QRP=22 QSL=05 DX=04
AK AL AR CA CO CT DE FL GA IA IL IN KS KY LA MA MD MI MN
MO NC ND NE NH NJ NM NY OK OR PA RI SC SD TN TX UT VA VT
WA WI WV WY
```

VE1 VE2 VE3 VE4 VE6 VE7 VE9

DX: N6GA, VE6GK, U5WF, AL7IK

```
=====
HEARD 48 STATES
```

WORKED 8 FROM QRP-L: K1LGQ KS4L KK5RO N6GA N7MOB WA9PWP
NN9K N0TFI KD0CA VE6GK

DX HEARD: 3B8 5N0 EU1YL F5 HA5 IK8 LZ1 OZ7C PY2 SP3EPK
S51 ZL1 ZL2 S58AL

```
=====
From owner-qrp-l@lehigh.edu Mon Jun 3 23:05:34 1996
```

From: "Robert J. Gobrick" <rgobrick@nfld.com>

Subject: [9335] Re: Heathkit Quality Kits Today

Message-ID: <2.2.32.19960603011312.00a3d494@public.compuser.net>

Byron and QRP-L gang,

Byron brought up a key point - something new and innovative for QRPers.

Has anyone checked out the latest issue of QEX - April 1996? Don Kirk WD8DSB writes about a design that Howie Cohn (QRP-Ler) wrote about in the August 94 issue of QST. Are you ready for this - Three chip Ultimate VFO - continuous VFO coverage from DC to 25 Mhz on a DDS chip with built in xmt offset, RIT, 1 Hz freq display and more. - THREE chips: Analog Devices DDS,

Motorola microcomputer chip and Phillips display chip. I bet there is a QRP manufacturer working on this one with the price of variable caps getting sky high and people wanting more vfo coverage (and multiband) than offered by a varicap or heterodyned varicap.

Anyone playing around with this circuit. Howie - are you checking your email?

THINGS ARE HAPPENING.

73/72 Bob VO1DRB/WA6ERB

At 21:16 6/3/96 -0400, you wrote:

>In a message dated 96-06-03 09:21:30 EDT, you write:

>The next point is: Perhaps Ten Tec will come up with a new innovation, that
>everyone here will drool over, until they get one too. The LCD and LED freq
>readouts, LCD RF output, LCD bar graph S-meter (from NorCal) are just now
>appearing. Ten Tec could have any of those features in mind. maybe even a
>successor to the Argonaut 505/509/515 series.

>Who knows what they might come up with ? I say, them em do it !!!!!

>

>Maybe i better start saving my money.....

>

>72, Byron WA8LCZ Detroit

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-----
| Bob Gobrick - VO1DRB/WA6ERB/VE2DRB - Newfoundland, Canada |
| QRPer Galore - ARCI, GQRP, NORCAL, NEQRP, COQRP, MIQRP, NWQRP |
| Internet:     rgobrick@nfld.com |
|               bgobrick@nlnet.nf.ca |
| Compuserve:  70466.1405@compuserve.com |
|-----
```

From owner-qrp-1@lehigh.edu Mon Jun 3 23:05:34 1996

From: W3HMS@aol.com

Subject: [9340] Re: Heathkit Quality Kits Today

Message-ID: <960603235042_406703465@emout15.mail.aol.com>

Yes, very well said.....the market place isn't perfect....but who has a better method?

John, W3HMS

From owner-qrp-1@lehigh.edu Mon Jun 3 23:05:34 1996
From: Bill Acito 03-Jun-1996 1311 <acito@asdg.ENET.dec.com>
Subject: [9305] re: HW-9 for sale
Message-ID: <9606031708.AA28114@us1rmc.bb.dec.com>

The HW-9 that was posted this morning has a pending offer;
i.e. it's sold.

I'll repost if something falls through.

b

. - I own my own words -
Bill Acito
acito@asdg.enet.dec.com
|d|i|g|i|t|a|l| Digital Equipment Corporation Hudson, MA

KC1GS qrp-ne qrp-1 arci norcal amsat-na arrl-life

Listen for me on weekend and weekday lunchtime passes of AMRAD-OSCAR 27
(32 NA Grids, 3 EU, and 22 States Worked from FN42)

From owner-qrp-1@lehigh.edu Mon Jun 3 23:05:34 1996
From: "Dana H. Myers" <myers@bigboy.West.Sun.COM>
Subject: [9301] Re: measuring QRP output power
Message-ID: <Roam.3.0.833819529.5761.myers@bigboy>

leinwebe@mcmail.CIS.McMaster.CA wrote:

> In <m0uQ7Ex-0001H8C@aoc.state.nc.us>,
> Brian.S.Allen%NCAOCISD@smtpgw.aoc.state.nc.us wrote: >I am interested in
> measureing the output of a qrp transmitter but do not have >access to a
> sensitive wattmeter. Is there a procedure to measure the power >output
> without using a meter???? >

> Brian,
> Sounds like you need to start making some basic test equipment.
> A dummy load with diode rectifier attached is a good place to start.

[...]

```

>
> -----+
> |      | | |
> | 50 ohm coax to transmitter | diode |
> | 50 ohms / | | | to
> | dummy \ capacitor _ _ D.C.
> | load/ | | meter
> |      | | |
> ----- -
>

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[...]

```
>
> Your rig will actually be putting out a little more power, since the
> diode requires a little extra voltage to forward bias - subtracting
> from the voltage your meter measures.
```

Have a look at QRP Classics (ARRL) if you're interested in the details.

From owner-qrp-1@lehigh.edu Mon Jun 3 23:05:34 1996
From: adams@chuck.dallas.sgi.com (chuck adams)
Subject: [9302] Re: measuring QRP output power
Message-ID: <199606031631.QAA12899@chuck.dallas.sgi.com>

Gang,

Glen Leinweber gave an excellent posting on measuring power output from a rig. Make sure that you use good building and shielding techniques to avoid stray RF induced voltages etc.

To calibrate and take into account the voltage drop across the diode, which by the way is non-linear, if you have a variable voltage source apply it to the 50 ohm load starting at 0 volts and plot the applied voltage to the load vs. the output voltage across the capacitor. Use this chart to determine accurately what is the actual power level. Milage may vary from diode to diode.

I might suggest that you use a 100uF or so electrolytic for the capacitor with + lead to the + lead of the DC or digital meter. This makes the time constant large and removes some inaccuracies in measurements.

Oh, and don't run power to the dummy load for very long at the larger voltages. The smoke monster will escape thus rendering the dummy load somewhat useless. :-)

Thanks Glen.

dit dit

--

Chuck Adams (K5FO CP-60) adams@sgi.com
K5FO TMPS 1996 Qs=021 States=15 Confirmed=07 DX=01
AZ CA CO FL IL IN MI OK OR SD TN TX UT WI WY

From owner-qrp-1@lehigh.edu Mon Jun 3 23:05:34 1996
From: bowman@montana.com (robert bowman)
Subject: [9304] Re: measuring QRP output power
Message-ID: <199606031640.KAA12583@paw.montana.com>

>In <m0uQ7Ex-0001H8C@aoc.state.nc.us>,
Brian.S.Allen%NCAOCISD@smtpgw.aoc.state.nc.us wrote:
>

>Or if you're into VERY low power QRPp, then try a germanium diode, like

1N34. It'll give better accuracy.

note the VERY. i ate a bunch of '34s with an IR510 final that tended to ring a bit. never measured the exact fatal piv, but it is well under 60v. 'course, when the RF goes away, you suspect the transmitter, not the probe, right? :<

From owner-qrp-1@lehigh.edu Mon Jun 3 23:05:34 1996
From: N5EM@aol.com
Subject: [9293] Re: monday sprints
Message-ID: <960603101429_126610147@emout13.mail.aol.com>

In a message dated 96-06-02 22:28:47 EDT, you write:

>
>Hmmm.....Just a thought...Monday night 1800hrs...first monday of the week
>..spartan sprint...ok right now ..what happens when Monday Night FOOTBALL
>starts...hi hi..73's rich wd6fdd
>
>
>

Football? Futball? Foeyball!

Swore them overpaid, arrogant "professionals" off when they went on strike.
QRO if ever I saw it! You need to find a real QRP sport. Ping-pong, for example. Heck, we ran our team right out of town :-)

Ed, N5EM, in HOUSTON
Former home of the Oilers. Apologies to Nashville.

From owner-qrp-1@lehigh.edu Mon Jun 3 23:05:34 1996
From: "David D. Meacham" <ddm@datatamers.com>
Subject: [9321] Re: NC 40A Review QST 6/96
Message-ID: <Pine.LNX.3.91.960603160953.28838B-100000@dt1.datatamers.com>

Allen,
I built my NC-40 (the first model) with only ONE rod and used 1/4-inch diameter aluminum rod located at the center of the panels, at the bottom.

It made a BIG difference and is quite adequate.
72, Dave, W6EMD

From owner-qrp-1@lehigh.edu Mon Jun 3 23:05:34 1996
From: James Bell <jim.bell@canada.cdev.com>
Subject: [9286] Re: PHASED VERTICALS
Message-ID: <199606031238.IAA65026@nss2.CC.Lehigh.EDU>

Hi Nils WB8IJN,
Nils, re my XYL making me take down my 40 M folded dipole,
I'll have you know that I'M BOSS IN MY HOUSE AND I'LL COME OUT
FROM UNDER THE TABLE WHEN I WANT TO.-}
72 JIM VE3DDY

From owner-qrp-1@lehigh.edu Mon Jun 3 23:05:34 1996
From: Joe Everhart <n2cx@voicenet.com>
Subject: [9327] Re: Shorthand CW
Message-ID: <199606040104.VAA12514@mail.voicenet.com>

Dan, A week or so, you expressed puzzlement that the letter "R" is used as a decimal point in cw abbreviations. I have a very logical explanation. The "decimal" point in ordinary decimal numbers is used to indicate a separation between the integer and fractional part of a number. For example in 1.5 (or 1R5) the integer part is "1" and the fractional part is "5" or actually 5/10.

More generally the "dot" to separate the integer and fractional part of a number is called the "radix" point. In the decimal number system the radix is 10. In a binary system it would be 2, so the radix point would be a binary point. In a hexadecimal system (base 16), I guess it would be a hexadecimal point.

All this is just a long way of saying that maybe someone way back when cleverly figured that "R" was a good logical abbreviation for the "." in numbers.

Of course as some famous person once said that for every problem there is a solution that is simple elegant and wrong! Who knows?

72/73,

Joe E., N2CX

work: jeverhart@cayman.vf.mmc.com
home: n2cx@voicenet.com

From owner-qrp-1@lehigh.edu Mon Jun 3 23:05:34 1996
From: adams@chuck.dallas.sgi.com (chuck adams)
Subject: [9341] Re: Shorthand CW
Message-ID: <199606040354.DAA16091@chuck.dallas.sgi.com>

Joe is right. The R is used as a "." in numbers among the old timers.

I gave up using it when giving out the power as 0R95 W and just send 1W and take care of the rest when I send the QSL card.

After I'm sure the station is an old hand at CW I'll come back with the more accurate figure.

R also means "roger". Sent upon first coming back to a station to acknowledge receipt of transmission. I don't have to repeat anything they said (kinda like net-etiquette :-) by not copying message upon replies) and can go on with new stuff. Hear and talk to a lot of stations that think that I don't believe 'em and that it is a quiz. Hey, I trust you - don't repeat my transmission. I know what I said. :-)

dit dit

--

Chuck Adams (K5FO CP-60) adams@sgi.com
K5FO Tmps 1996 Qs=021 States=15 Confirmed=07 DX=01
AZ CA CO FL IL IN MI OK OR SD TN TX UT WI WY

From owner-qrp-1@lehigh.edu Mon Jun 3 23:05:34 1996
From: "Robert J. Gobrick" <rgobrick@nfld.com>
Subject: [9336] Re: SW-30 HELP!!
Message-ID: <2.2.32.19960603011314.00a11448@public.compuser.net>

Hi Al - I'll post this to the gang,

I have built two early versions of the SW 30 and SW 40 - the New England 30-40 and 40-40.

On both kits I had some instability problems with I attribute to ground loop

problems. On both rigs I mounted the board as Dave does in his cabinet kit for these two rigs. The board is mounted to the cabinet on 4 nylon standoffs and the ONLY ground lead to the panel mounted jacks (key, power and audio) is via the braid on the small piece of RG-174 coax going to the antenna jack. Thus only one ground strap. All the other connectors are just wired with their hot leads. Anyway that worked for me and I suspect since the early SW units were single sided pc boards that the lack of a ground plane may have become a problem when you tried to add "more" ground plane. Just MY theory but it worked for me.

Good luck and let us know what you find out - we are all interested.

73/72 Bob V01DRB/WA6ERB

PS: Dave's new Green Mountain series of rigs are double sided boards so I would mount those with the standard aluminum standoffs.

At 20:22 6/3/96 -0400, you wrote:

>OK, all of you gurus out there ... I'd really appreciate some help with a
>problem I'm having with my SW-30. I recently decided that it is time to
>complete this project. After all, I built the board almost a year ago and
>all I need to do is put it in a proper box. Besides, I decided that I have
>to finish something before I can start on all the neat kits I bought at
>Dayton ;-).

>

>The problem is that, on transmit, as I turn the RF drive pot (R2) up,
>everything seems to break into oscillation. Looking at the output on my
>WM-1, this seems to happen with about 1 watt of output. The first sign of
>trouble is that the audio amplifier starts motorboating (I think). If I
>look at the output of the rig by connecting my scope across the dummy load,
>it looks ok until the oscillation starts ... then a sort of "kink" appears
>in the waveform. The output of the driver (Q5) doesn't look that good to
>begin with (high frequency stuff superimposed on top of the good stuff) and
>gets really ugly when the thing starts oscillating. The output of Q4 shows
>similar nasty things.

>

>My first thought was that it is some sort of ground loop problem. Right now
>I have the board mounted over a piece of unetched circuit board material
>using aluminum standoffs to complete the ground connection between the SW-30
>and the ground plane ... all ground connections are soldered to the piece of
>circuit board material. Similar results were obtained with the SW-30
>mounted in a re-cycled, steel RS-232 switch box. The funny thing is, I
>don't remember this sort of behavior right after I completed the rig and
>mounted it on the scrap of circuit board material ... and I am pretty sure I
>would have noticed, it's pretty startling when the audio amp takes off like
>that :-).

>

>Anyway, any help and advice would be much appreciated. Tnx in advance es

>
>72,
>
>Al Moyle N3KFL
>
>
>

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-----  
| Bob Gobrick - V01DRB/WA6ERB/VE2DRB - Newfoundland, Canada |  
| QRPer Galore - ARCI, GQRP, NORCAL, NEQRP, COQRP, MIQRP, NWQRP |  
| Internet:      rgobrick@nfld.com |  
|                bgobrick@nlnet.nf.ca |  
| Compuserve:   70466.1405@compuserve.com |  
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From owner-qrp-1@lehigh.edu Mon Jun 3 23:05:34 1996
From: "Robert J. Gobrick" <rgobrick@nfld.com>
Subject: [9322] Re: SWL-30 DX
Message-ID: <2.2.32.19960602225132.009ff8b0@public.compuserve.nf.ca>

Jim,

Just a case of beginners luck...

73/72 Bob V01DRB/WA6ERB

PS: EU7SA I meant :^)

At 13:36 5/31/96 -0400, you wrote:

>
>Surprise !
>
>While checking out a new RS DSP audio filter on an SWL-30
>meter rig, I had a nice surprise.
>
>I was using a random wire antenna and a home brew tuner
>and had no SWR meter in the line.
>
>The band was quite dead except for a weak station calling CQ.
>
>I peaked the ant. tuner by listening to the audio and just
>for fun called the station (EU7SA, Russia).
>
>He came back: And we completed a QSO. That's the surprise !
>

>I measured the output of the SWL-30 on a Welz RP-120 wattmeter,
>at less than 400 milliwatts (0.4 watt).
>
>(By the way, I heard EU7SA on again last night, calling CQ DX around
> 10 p.m. est, with quite a bunch calling him.)
>
>Since then I have worked a few stations only by peaking the tuner by
>listening to the audio level.
>
>Ain't QRP grand ? And fun.....
>
>72 W1FMR
>
>

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-----
| Bob Gobrick - VO1DRB/WA6ERB/VE2DRB - Newfoundland, Canada |
| QRPer Galore - ARCI, GQRP, NORCAL, NEQRP, COQRP, MIQRP, NWQRP |
| Internet:      rgobrick@nfld.com |
|                bgobrick@nlnet.nf.ca |
| Compuserve:   70466.1405@compuserve.com |
|-----
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From owner-qrp-l@lehigh.edu Mon Jun 3 23:05:34 1996
From: "Robert J. Gobrick" <rgobrick@nfld.com>
Subject: [9323] Re: TenTec Survey
Message-ID: <2.2.32.19960602225137.00a2bf7c@public.compusult.nf.ca>

Don (must be a North Georgia QRP Society member) and QRP-L Gang,

I have to agree with Don's comments and I think some folks may have missed the point of Ten Tec selling a 40 meter QRP CW kit. Did you ever think that Ten Tec has an absolutely fanatic following of Paragon and Omni VI QRO owners out there who are probably getting a little bored with their rigs and are waiting for Ten Tec to offer something NEW. What better way to get a whole bunch of loyal Ten Tec operators into QRP then for Ten Tec to offer THEM a 40 meter QRP cw kit with QSK. Why heck, maybe like you and I this will be the carrot that these folks need to make the leap into "real" radio. Anyway Ten Tec are big boys - they may be slowly "making" a come-back into QRP so they don't quickly fade away.

Yea - more QRP rigs out in the market place - not being smug but we here on the QRP-L list are not the only folks buying QRP rigs.

Why Wayne Green may even be getting interested in QRP (I'm sure some how or other he must have been one of the founders of QRP). I noticed in the June

1996 issue of 73 that even WAYNE made a personal footnote to Marshall Emm - AA0XI/VK5FN (CQC) nice review of Dave Benson's NN1G Small Wonder Lab Green Mountain GM-20 20 meter QRP xcvr.

QRP is GROWING. First Ten Tec then Yaesu, Icom and Kenwood with simple (???) DSP QRP rigs.

73/72 Bob V01DRB/WA6ERB

At 10:02 6/2/96 EDT, you wrote:

>I'll admit that I tend to look at TenTec through rose colored glasses.
>Yes, there are already many excellent 40 meter transceiver kits
>available. I own one of them. But any individual or company who
>starts out with a single band QRP kit on any band other than 40 is
>looking for failure. Hopefully this will be just the first of many
>great QRP kits from TenTec.

>

>Forty meters is still the most popular band for QRP. The market for
>simple, inexpensive 40 meter QRP kits is far from saturated. There
>are still many who have not yet discovered the world of QRP.

>TenTec has the marketing clout and reputation to reach many others.

>They are going up against some tough competition. Time will tell if
>they are up to it.

>

>73,

>

>Don WA4IML Athens Georgia

>

>

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| Bob Gobrick - V01DRB/WA6ERB/VE2DRB - Newfoundland, Canada |
| QRPer Galore - ARCI, GQRP, NORCAL, NEQRP, COQRP, MIQRP, NWQRP |
| Internet:      rgobrick@nfld.com |
|                bgobrick@nlnet.nf.ca |
| Compuserve:   70466.1405@compuserve.com |
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